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Title: Coated fertilizer and its coating method and equipment for manufacturing said coated fertilizer			
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<b>Abstract</b>			
A coated fertilizer is prepared from animal glue, solubilizer, organic acid, inorganic acid, plant nutrient compound and cationic surfactant by spraying coating material (0.3-0.8%) onto surface of fertilizer particles whose nitrogen content is up to 46% in granulating tower. With said coated fertilizer, the yield is increased by 5-6% for rice, 7-8% for cane, 4-10% for peanut, 7-17% for vegetables, 10% for wheat, 13% for cotton.			

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AN 1999:780514 CAPLUS  
DN 131:350772  
TI Manufacture of coated \*\*\*fertilizer\*\*\* and its equipment  
IN Chen, Dazhao; Yan, Zongbiao; Chen, Jihui; Yuan, Jiyan; He, Weijia; Chen, Suzhen  
PA Guangzhou Nitrogenous Fertilizer Plant, Peop. Rep. China  
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 33 pp.  
CODEN: CNXXEV  
DT Patent  
LA Chinese

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PI	CN 1150941	A	19970604	CN 1996-105688	19960606
	CN 1040097	B	19981007		

AB The \*\*\*fertilizer\*\*\* is composed of \*\*\*granular\*\*\*  
\*\*\*fertilizer\*\*\* and coating material. The coating material is  
composed

of animal glue 0.1-50, solubilizer 1-180, org. acid 0.05-30, inorg. acid 0.1-15, \*\*\*plant\*\*\* nutrient compd. 0.1-200, surfactant 0.1-15, and water 5-450 parts, preferably animal glue 1-10, solubilizer 10-100, org. acid 1-10, inorg. acid 1-5, \*\*\*plant\*\*\* nutrient element compd. 10-120, surfactant 2-7, and water 100-300 parts. The org. acid is selected from one or more of maleic acid, oxalic acid, lauric acid, formic

acid, acetic acid, \*\*\*humic\*\*\* \*\*\*acid\*\*\*, citric acid, and adipic acid; the inorg. acid from one or more of  $H_3PO_4$ ,  $HCl$ ,  $H_2SO_4$ ,  $HNO_3$ , and  $H_3BO_3$ ; the animal glue from one or more of hide glue, bone glue, and mixed glue; the \*\*\*plant\*\*\* nutrient element compd. from one or more of sulfate of Fe, Zn, Mn, Mo, Cu, Mg, Ti, and K; the solubilizer from one or more of urea,  $(NH_4)_2SO_4$ ,  $NH_4NO_3$ ,  $MgSO_4$ , and  $NH_4$  citrate; and the surfactant from quaternary cationics. The \*\*\*granular\*\*\* \*\*\*fertilizer\*\*\* is selected from one or more chem. \*\*\*fertilizer\*\*\* of N \*\*\*fertilizer\*\*\*, P \*\*\*fertilizer\*\*\*, and K \*\*\*fertilizer\*\*\*, and \*\*\*humic\*\*\* \*\*\*acid\*\*\* \*\*\*fertilizer\*\*\*. The N \*\*\*fertilizer\*\*\* is selected from one or more of urea,  $NH_4NO_3$ ,  $NH_4Cl$ ,  $(NH_4)_2SO_4$ , and  $Ca(NO_3)_2$ ; the P \*\*\*fertilizer\*\*\* from one or more of triple superphosphate, double superphosphate,  $(NH_4)_3PO_4$ , ammonium nitrophosphate, ammonium ureido- \*\*\*phosphate\*\*\* (Niaolin'an),  $NH_4$  polyphosphate, nitrophoska, fused Ca-Mg \*\*\*phosphate\*\*\*, defluorinated \*\*\*phosphate\*\*\*, Thomas \*\*\*phosphate\*\*\*, ordinary superphosphate, calcium \*\*\*phosphate\*\*\*, Ca \*\*\*phosphate\*\*\*, and ground \*\*\*phosphate\*\*\* rock \*\*\*fertilizer\*\*\*; and the \*\*\*humic\*\*\* \*\*\*acid\*\*\* \*\*\*fertilizer\*\*\* from one or more of Na \*\*\*humate\*\*\*, K \*\*\*humate\*\*\*,  $NH_4$  \*\*\*humate\*\*\*, \*\*\*humic\*\*\* \*\*\*acid\*\*\*, nitro- \*\*\*humic\*\*\* \*\*\*acid\*\*\*. The coated \*\*\*fertilizer\*\*\* is prepd. by inhaling coating material in sprayer by 0.3-0.5 MPa compressed air, coating the \*\*\*granular\*\*\* by spraying coating material, drying, and oxidizing. The addn. of the coating material is 6-10 kg/ton. The equipment is composed of reactor, filter, pump, storage tank, elevated tank, coating sprayer, and pelleting tower. The coating sprayer is composed of air-spraying pipe, coat-emulsifying pipe, const.-diam. spray pipe, nozzle, and air entrance. The const.-diam. spray pipe is connected with coat-emulsifying pipe at one mouth, with nozzle at another mouth. The coat-emulsifying pipe is composed of a flange at its front-end, a content-diam. piper at the medium, a columnar cavity connected with two expanded-diam. pipes at each end between flange and medium, and a coat-entrance pipe mounted nearby flange. The spout diam. of nozzle is 6-8 mm.